REMARKS

This Application has been carefully reviewed in light of the Advisory Action mailed December 27, 2006, and the Final Office Action mailed October 16, 2006. At the time of the Final Office Action, Claims 1-7 and 9-50 were pending in this Application. Claims 25 and 27-40 were previously withdrawn. Claims 1-7, 9-24, 26, 41-46 and 49 were allowed. Applicants make note that previously withdrawn Claims 4, 5, 9, 12-14 and 18-22 were allowed. Claims 47, 48 and 50 were rejected. Claim 50 has now been cancelled.

Applicants respectfully request consideration of the remarks below and favorable action in this case.

Rejections under 35 U.S.C. §103

Claims 47, 48, and 50 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,389,096 issued to Aita et al. ("Aita") in view of the teachings of U.S. Patent No. 5,902,289 issued to Swartz et al. ("Swartz"), U.S. Patent No. 4,682,596 issued to Bales et al. ("Bales"), and U.S. Patent No. 5,334,193 issued to Nardella ("Nardella"). Applicants respectfully traverse.

Claim 50 has been cancelled. Both of Claims 47 and 48 include the following steps:

"contacting the active electrode with an electrically conducting fluid disposed in a space between the active electrode and the target tissue";

"inducing discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high-frequency voltage between the active electrode and the return electrode..."; and

"directing the energetic electrons and photons to ablate tissue at the heart wall...".

The teachings of Aita, Swartz, Bales and Nardella

The office action concedes that Aita does not disclose the use of electrosurgical energy. The Swartz reference is cited to teach that it is known to use RF energy to ablate cardiac tissue. Bales and Nardella are cited for the teaching of bipolar electrode arrangements.

Applicants submit that the cited references do not disclose all the claimed limitations, which is required to establish a prima facie case of obviousness. See In re Royka, 490 F.2d 981,

180 U.S.P.Q. 580 (C.C.P.A. 1974). Specifically, the combination proposed by the Office Action would utilize a bipolar apparatus as taught by Bales or Nardella. Notably, however, it is well known that during use of a traditional bipolar device, such as those taught by Bales and Nardella, electric current is applied directly to the target tissue. See Bales Col. 7, lines 19-21 and Col. 10, lines 27-30 and Nardella Col. 5, lines 54-64, Col. 6, lines 59-60, and Col. 7, lines 24-25. In other words, during operation of a bipolar device, the mechanism for ablating tissue is the sending of current through the target tissue. The delivery of fluid contemplated by Bales and Nardella does not utilize such fluid as a mechanism to ablate tissue. Instead, the fluid delivery of Bales is provided to "deliver flushing fluid to carry resolved debris away from the distal end 18." (Col. 5, 48-49) and the cited fluid delivery of Nardella is directed to maintaining the electrodes at a desired temperature (Col. 4, lines 42-54).

Neither Bales nor Nardella makes any disclosure, teaching or suggestion of using an electrosurgical device to apply energy to a conductive fluid, the byproduct of which (energetic electrons and photons) is then used to ablate the target tissue, as claimed.

Inherency Contentions

The office action also contends that the cited system "provides for the electrode structure for treating tissue in the vicinity of a saline solution with the appropriate voltage levels would inherently yield the same results." Page 4. Applicants traverse. First, the cited reference provides no indication that it was known at the time of the invention that applying high-frequency voltage between an active and return electrode (with a conductive fluid therebetween) might induce discharge of electrons and photons from the conductive fluid that could be directed to ablate tissue. As has been well established, "obviousness cannot be predicated on what is not known at the time an invention is made, even if the inherency of a certain feature is later established." MPEP §2141.02 citing *In re Rijckaert*, 9 F.3d 1521, 28 USPQ2d 1955 (Fed. Cir. 1993).

Second, whether the use of the combined-teaching device would inherently result in the discharge of energetic electrons and photons capable of ablating tissues is unknown. As is put forth in the description of the present application, in order to produce the necessary vapor layer

conditions to ablate tissue, the active and return electrodes must have "suitable electrode surface geometries for producing the sufficiently high electric field intensities to reach the threshold conditions for vapor layer formation..." Application, page 21, lines 15-18. Additional factors, such as proximity of the electrodes to one another, the relative surface area between the electrodes and voltage and frequency applied to the conductive fluid will also effect whether a suitable vapor layer is formed which will be capable of ablating tissue. At best, the proposed combination may yield the contended result. However, the "mere fact that a certain thing *may* result from a given set of circumstances is not sufficient [to establish inherency.]" *In re Rijckaert*, at 1534 citing *In re Oelrich,* 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981).

Accordingly, Applicants submit that the inherency contentions posed in the Office Action are not sufficient to render obvious Claims 47 and 48.

Applicants submit that Claims 47 and 48 are not rendered obvious by the cited combination. Applicants request reconsideration, withdrawal of the rejections under §103 and full allowance of Claims 47 and 48.

Allowable Subject Matter

Applicants appreciate Examiner's indication that Claims 1-7, 9-24, 26, 41-46 and 49 were allowed in the Final Office Action.

CONCLUSION

Applicants have made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of the pending claims.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-0359 of ArthroCare Corporation in order to effectuate this filing.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.391.3961.

Respectfully submitted
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